



STATE OF MARYLAND

DHMH

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July 15, 2008

Public Health & Emergency Preparedness Bulletin: # 2008:28 **Reporting for the week ending 07/12/08 (MMWR Week #28)**

CURRENT HOMELAND SECURITY THREAT LEVELS

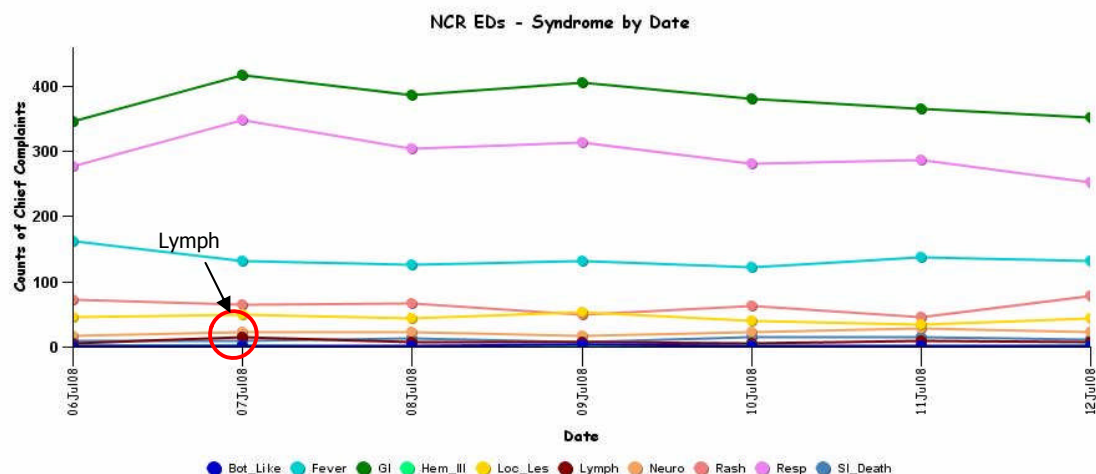
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

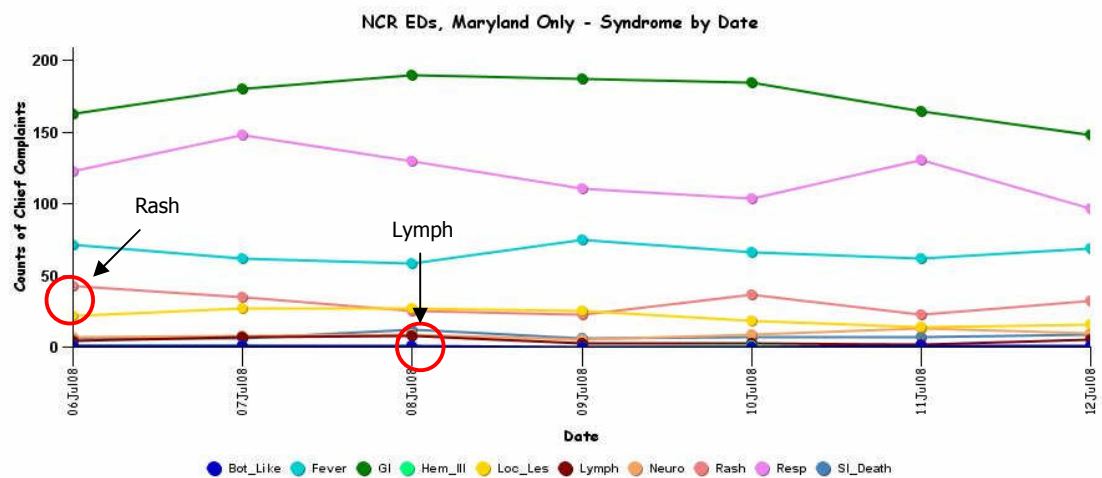
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

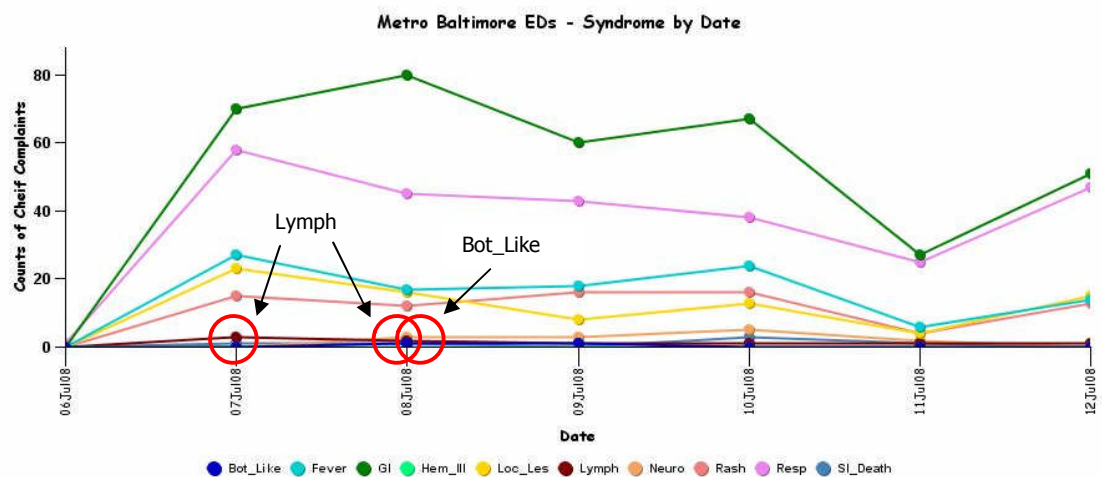
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system

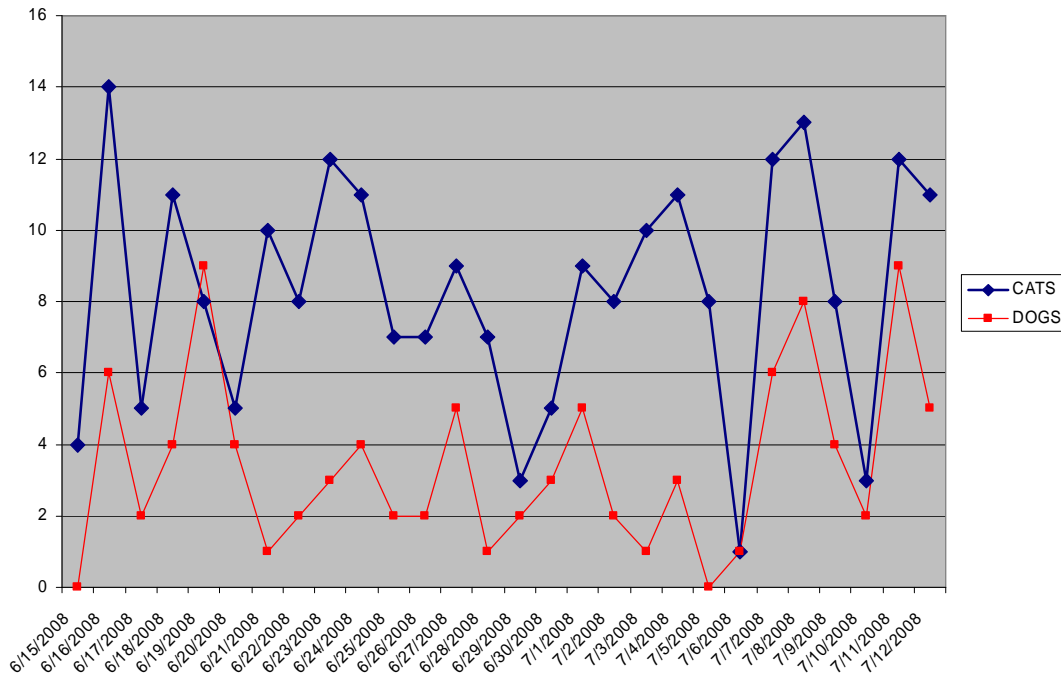


****NOTE: Data for Jul 06 was not available at this time, due to temporary technical issues that are being addressed****

* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

Dead Animal Pick-Up Calls to 311

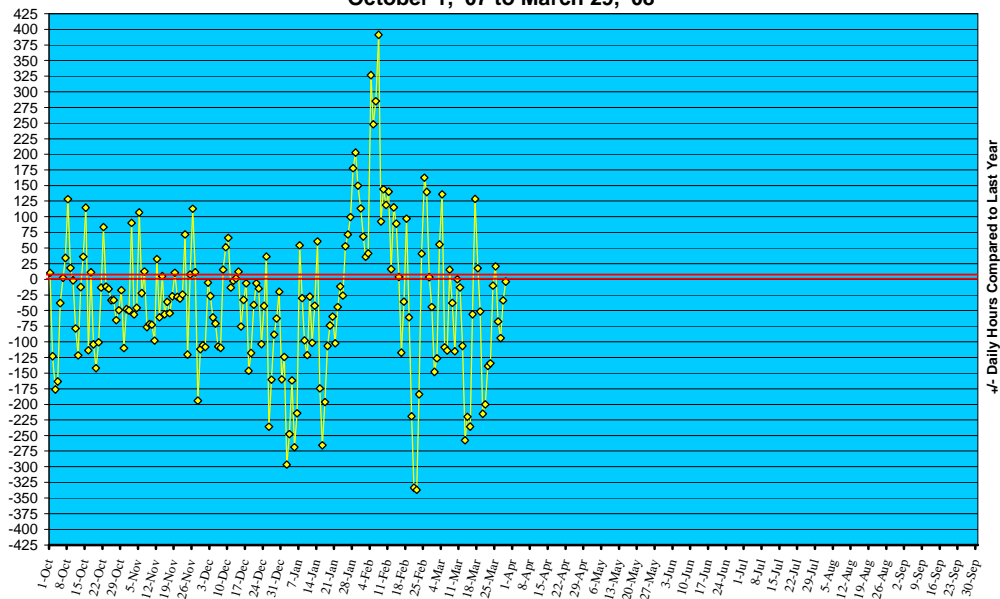


REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

*Note: No new data available at this time.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '07 to March 29, '08**



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Jul 06 – 12, 2008):	14	0
Prior week (Jun 29 –Jul 05, 2008):	12	0
Week#28, 2007 (Jul 08 –14, 2007):	11	0

OUTBREAKS: 1 outbreak was reported to DHMH during MMWR Week 28 (July 6-July 12, 2008):

1 Foodborne outbreak

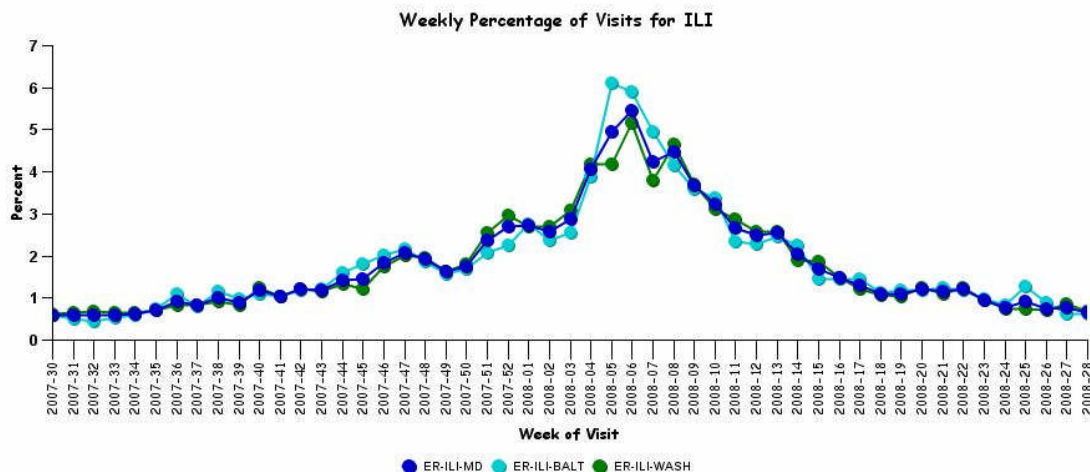
1 outbreak of **FOODBORNE INTOXICATION** associated with a Private Home

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: <http://bioterrorism.dhmm.state.md.us/flu.htm>

WHO update: As of June 19, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 385, of which 243 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA (Hong Kong): The Secretary for Food and Health of Hong Kong York Chow Wednesday [July 9, 2008] announced the scale down of the response level for avian influenza from "serious" to "alert." After the detection of H5N1 avian influenza in environmental samples collected from poultry stalls in Po On Road Market, Sham Shui Po, on June 7, 2008, the government had raised the response level to "serious." With more environmental samples from 3 other retail markets found to have the virus on June 11, 2008, live chicken trading in Hong Kong was suspended for 21 days.

AVIAN INFLUENZA (England) Defra has today [July 11, 2008] published a final epidemiology report into the avian influenza outbreak confirmed in Oxfordshire on June 4 [2008]. The report concludes that at the time of writing (July 2, 2008) infection was confined to a single premise, and there is no evidence of infection on any contact or geographically close premises, or evidence of spread of infection to any other premises to date. While it has not been possible to conclusively identify the source of the infection, the 2 most likely sources of the outbreak are thought to be: unidentified avian influenza in domestic premises in Great Britain, associated either by proximity or potential contact, or avian influenza in wildlife in contact with the IP [infected premise]. Investigations are now complete. Deputy chief veterinary officer, Alick Simmons, said: "This incident has demonstrated again the potential for avian influenza to be introduced into domestic poultry in the UK. The risk of further incidents, while low, remains. I urge poultry keepers to maintain the highest standards of biosecurity and to report suspicion of disease promptly including where records indicate increased mortality or reduced performance."

NATIONAL DISEASE REPORTS:

PLAGUE, PRAIRIE DOG, FERRETS (South Dakota): The area of plague-infected black-tailed prairie dogs has more than doubled in western South Dakota since mid-May [2008], and the disease could begin to seriously hurt the state's population of endangered black-footed ferrets. Plague is almost always fatal to infected prairie dogs and has killed a large number of the rodents, wildlife experts said. Black-footed ferrets hunt and dine almost exclusively on prairie dogs. "When ferrets eat an infected prairie dog, they'll get a massive dose" of plague, said Kevin Atchley, Wall District ranger for the U.S. Forest Service. "It's likely that some ferrets have perished." The infected area has bloomed from 4000 acres to 9100 acres as of last week [July 1-4, 2008], Atchley said. The infected area is within the 300 000-acre Conata Basin south of Wall, SD. Plague is an infectious disease caused by the bacterium *Yersinia pestis*. The disease, also known as bubonic plague, spread through the West after it appeared in San Francisco in 1902. It was 1st detected in South Dakota wildlife in western Custer County in 2004. The disease is mainly spread through wildlife populations -- coyotes being a favored traveling host -- by infected fleas that transmit the disease through their bite. In late May [2008], workers with the U.S. Fish and Wildlife Service, the U.S. Forest Service, the National Park Service and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service began dusting prairie dog towns with insecticide to kill the fleas but keep the ferret's preferred food source alive. The insecticide, similar to what is given to dogs and cats to control fleas, is released via a wand sprayer from a tank mounted on an all-terrain vehicle. Workers stick the wand down each burrow entrance to release the dust. As the prairie dogs enter and exit, the dust is rubbed into the fur and kills the fleas. As of last week, workers dusted 2440 acres of prairie dog towns, including 700 acres within Badlands National Park. Dusting also will be done along Highway 44 and Conata Basin Road as a precaution against a transfer to people. Transmission between wildlife and humans is rare, but it is possible. There has never been a case of human plague reported in South Dakota, said state epidemiologist Dr. Lon Kightlinger. Still, signs have been posted along Highway 44 in the Conata Basin and Badlands National Park, warning visitors of the threat. The bright yellow signs advise people to stay in their vehicle -- and keep their pets inside the vehicle as well -- around prairie dog villages. Visitors don't seem to be worried. (Plague is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

MULTISTATE OUTBREAK OF SALMONELLA SAINTPAUL INFECTIONS: Since April, 1167 persons infected with *Salmonella* Saintpaul with the same genetic fingerprint have been identified in 42 states, the District of Columbia, and Canada. As of July 14, 2008, there are 32 persons identified as ill in Maryland. The accumulated data from all investigations indicate that jalapeño peppers caused some illnesses but that they do not explain all illnesses. Raw tomatoes, fresh serrano peppers, and fresh cilantro also remain under investigation. Investigators from many agencies

are collaborating to track the source of the implicated peppers and other produce items. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case
See below for other resources.

INTERNATIONAL DISEASE REPORTS:

YELLOW FEVER (Brazil): A 21-year-old farmer died in Parauapebas, in Para [state], from yellow fever according to the results of [laboratory] tests issued by the Instituto Evandro Chagas, this Thursday 19 [June 2008]. According to the state secretariat of Health, the young man lived in a rural area of the city and died on [June 9, 2008]. The Secretariat added that this is the 1st death due to this disease in the state in 2008. The farmer was admitted to the Belem city emergency clinic, but it was not possible [at that time] to determine if he had dengue hemorrhagic fever or yellow fever. (Viral hemorrhagic fever is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

UNIDENTIFIED VIRUS, FATAL, CHILDREN (Bangladesh): Experts from the School of Tropical Medicine in Kolkata have found chikungunya antibody in the blood samples collected from 4 of the 17 children who died recently in the Karandighi block of North Dinajpur district. The experts have also detected encephalitis antibody in the blood sample of a family member of one of the victims. [Presumably Japanese encephalitis virus antibody. - Mod.TY]The 17 children succumbed to the unknown disease at Choto Burihan, Bado Burihan, Rasakhua, Gopalpur, Gayeshpur and Rudel villages in Karandighi block last month [June 2008] and now the experts suspect the disease either was chikungunya or encephalitis. The development has triggered panic among the residents and they are all looking towards the health department for relief. According to the health department officials, following the spread of the mysterious disease and successive child deaths last month, experts from the School of Tropical Medicine, Kolkata, National Institute of Virology Department, Pune and National Institute of Communicable Diseases, New Delhi visited the affected areas and collected blood samples and serum from the affected children along with water samples of the area. According to district Deputy Chief Medical Officer of Health, Dr. Dipak Kumar Bhowmick, the experts from the School of Tropical Medicine in Kolkata have not confirmed the disease as either chikungunya or encephalitis. "The experts have suspected these diseases after antibodies were detected in the samples collected from the family members of some of the victims," he said. "Specialists of the National Institute of Communicable Diseases in New Delhi recently collected samples of the affected children along with water samples but have not been able to come to any conclusion about the origin of the disease." The doctors, however, said that treatment of the victims could not be initiated since the origin of the disease remains unknown. (Emerging Infectious Diseases are in Category C on the CDC list of Critical Biological Agents) *Non-suspect Case

ANTHRAX, HUMAN, LIVESTOCK (Russia): Two more people have been hospitalized with suspected anthrax in East Siberia's Republic of Buryatia, bringing the total number to 11, the republic's emergencies ministry said on Monday [July 7, 2008]. 7 people [had] been officially diagnosed with skin or intestinal anthrax. They are currently receiving medical treatment for the disease. Last week, 9 people were hospitalized in the republic's Barguzinsky Region with the suspected disease after coming into contact with sick cattle. Medics were been placed on high alert and meat supplies from several villages, close to the potential source of infection, have been suspended. A total of 210 people, who may have had contacted with the infection, are currently being treated with antibiotics. Anthrax most commonly infects wild animals and domestic cattle and sheep, which ingest or inhale the spores while grazing. Humans can be affected when exposed to blood and other tissues from infected animals. Anthrax can be highly lethal, but in some forms it responds well to antibiotic treatment and effective vaccines are available against the disease. (Anthrax is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

ANTHRAX, HUMAN, LIVESTOCK (Vietnam): Some 420 people have been poisoned, 2 fatally, in Ha Giang Province after eating anthrax-infected beef late last month [June 2008], according to a local health center. The provinces' Preventive Health Center said the infected people belonged to nearly 90 families in Po Qua Hamlet of Meo Vac District. On [June 21, 2008], 2 families in the hamlet shared beef with the affected families from their 2 cows, which died of unknown causes. Those eating the meat started vomiting, complained of stomachache and suffered from swollen legs. Two died on [June 29, 2008] after being hospitalized in a coma. Three others in critical condition are undergoing treatment at Meo Vac Hospital. Local health authorities said anthrax has broken out in the district and they are mobilizing resources to contain the disease. The number of affected animals is not known. They also warned residents against eating meat from infected animals. Anthrax is a highly infectious bacterial disease affecting mammals, especially cattle and sheep. It is transmissible to humans and can cause skin ulcers, pneumonia and even death. (Anthrax is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

CRIMEAN-CONGO HEMORRHAGIC FEVER (Turkey): On Mon July 7, 2008, 3 people were pronounced dead at hospitals in the provinces of Bursa, Canakkale, and Samsun, taking the death toll from tick bites to 37 in the past 2 months. According to the Dogan news agency, a resident of the western province of Bursa went camping 10 days ago and was bitten by a tick. He was hospitalised and diagnosed with the deadly Crimean-Congo hemorrhagic fever (CCHF), and moved to the intensive care unit. In the western province of Canakkale, a man died in hospital after being treated for suspected CCHF infection. He had told relatives that he had seen a tick on his body. He was buried in a zinc casket with lime spread over the grave as a precaution. Another person had died from CCHF in the same province last month [June 2008]. Another man died from CCHF on Monday [July 7, 2008] in the northern province of Samsun after he was bitten by a tick and removed it with his hand. The Health Ministry also issued a statement to warn people against ticks. In case of a tick bite the skin should be covered with [an antiseptic]. The tick should be removed by doctors using tweezers with great

care and iodine should be applied to the bite. Health Ministry officials said ticks should never be killed by hand. Moreover, those people, touched by any tick, should be kept under medical observation for 10 days, and go to the nearest hospital if they have symptoms such as fever, headache, nausea, vomiting, or diarrhea, officials from the Health Ministry said. CCHF mainly affects animals. Ticks, which live on sheep and cattle, can sometimes pass the virus to people. It is a [haemorrhagic] fever where patients can bleed to death if they are not treated quickly. Those infected can transmit the virus through their blood or saliva. The disease is endemic in parts of Africa, Asia, and Europe. Health authorities said a warmer climate, which Turkey has experienced in recent years, could mean a larger tick population that could in turn infect more people with the disease. (Viral hemorrhagic fever is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

CRIMEAN-CONGO HEMORRHAGIC FEVER, SUSPECTED (Greece): A 10-year-old boy is being treated for a high fever at a hospital in Alexandroupolis, northeastern Greece, after being bitten by a tick just days after a woman in nearby Komotini died from a similar [tick] bite. The 49-year-old woman died after being bitten by a tick while working on a farm. Tests showed that the [tick] had infected her with Crimean-Congo hemorrhagic fever (CCHF). It was not clear if an infected tick had also bitten the boy. His mother said she took the child to a dermatologist who removed the tick but the boy then began to feel ill. Doctors at the University Hospital of Alexandroupolis said on Saturday [July 5, 2008] that the boy was running a high temperature but his overall condition gave no cause for alarm. Authorities in northeastern Greece have agreed to spray livestock on local farms with insecticide to kill any ticks carrying the fever. Doctors have advised anyone bitten by ticks not to try and remove the [tick] but to go to a hospital immediately. (Viral hemorrhagic fever is in Category A on the CDC list of Critical Biological Agents) *Non-suspect Case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmd.state.md.us/>

Investigation of Outbreak of Infections Caused by *Salmonella* Saintpaul

Updated information on the recent outbreak of human *Salmonella* infections associated with consumption of raw tomatoes. (<http://www.cdc.gov/salmonella/saintpaul/>)

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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